CENTRAL INTELLIGENCE AGENCY

FLD 667

INFORMATION REPORT

CONFIDENTIAL

CD NO. 25X1A

COUNTRY Czechoslovakia

DATE DISTR. 16 AUG 49

SUBJECT The Nationalized Tesla Electric Corporation

NO. OF PAGES 2

PLACE ACQUIRED [redacted] 25X1A

NO. OF ENCLS. (LISTED BELOW)

DATE OF INFO. 25X1C [redacted]

SUPPLEMENT TO REPORT NO. 25X1X

[redacted]

1. The nationalized Tesla Corporation is a huge combine consisting of a number of factories producing radio and telephone equipment, electrical instruments, and light bulbs. Approximately 100 electrical equipment companies which were formerly in private hands have been absorbed by the Tesla Corporation. Only the Standard and Philips companies have remained outside the state monopoly.

2. The Tesla management is housed in the former Philips building on Karlovo Square, Prague II. The corporation has a technical and a commercial manager. All the separate plant managers come under their direction.

3. The following Tesla factories are located in Prague:

   a. Hlubetin I (formerly Philips): Produces commercial radio sets of the following types: Kongres, Kvinta, Melodik, Talisman, Romance, Rytmus.

   b. Hlubetin II (formerly Philips): Produces vacuum tubes for receivers (Series "Rada E") for technical use (18 F 24; pentode V_a =220 V, I_a =15 mA, V_z =18 V, S=9.5 mA/V; R_i=0, MR*18 L 24, end pentode, S=4.5 m A/V).

   c. Hlubetin III (formerly Always): Production and development of condensors, resistors, interfrequencies (sic, possibly transformers).

   d. Vrsovice: Produces transmitters of all types.

   e. Karlin (formerly Siemens): Produces telephone switchboards, multi-channel installations (carrier system).

   f. Holesovice (formerly Osram): Manufactures bulbs.

   g. Strasnice (formerly Mikrofina): Produces manual telephone switchboards, mine telephones, Pupine boxes. The plant also contains some development laboratories.

   h. Bechovice: Produces mechanical parts.

CONFIDENTIAL

STATE #	X	NAVY	X	NSRB		DISTRIBUTION							
ARMY #	X	AIR	X	FBI									

25X1A

4. The following Tesla plants are located outside Prague, elsewhere in Czechoslovakia:

   a. Pardubice (formerly Telegrafie): Manufactures specialized radio apparatus, telephone switchboards, telegraph instruments. It also contains some development laboratories.

   b. Vrchlabí (formerly Lorenz, Berlin): Carries out research and produces vacuum tubes.

   c. Other less important plants are located in Kutná Hora, Kolin, Prelouč, Brno, Valasske Mezerici, and Bratislava.

5. Each category of production belongs to a particular "sector", with a sector manager at its head. Every sector has a planning department which receives orders and devises a production plan, and a sales department which attends to deliveries. Production has been scheduled according to the Five-Year Plan and is reported to be proceeding at a rate leading to 100 percent fulfillment. The quality of the products is not good, however, and a number of bottlenecks are being encountered. The covering cones for cathode sleeves constitute the principal bottleneck.

6. The question of raw materials procurement is a serious one. There is a grave shortage of non-ferrous metals in Czechoslovakia and a house-to-house scrap metal drive has been organized. Most serious is the shortage of special alloys for transformers, translators (tlumivkove"), metal sheets, and the circular cores of coils. Materials left behind by the Germans are rapidly being used up. Experiments are being made with the production of domestic permalloys, but without success. The required metal sheets and cores are being imported mainly from the United Kingdom.

7. Political reliability is the criterion governing the selection of personnel for leading positions in the Tesla combine, and the standards of technical competence are not especially high. The entire combine is suffering from the dislocation caused by a series of reorganizations. The Bata system of autonomous enterprises is being introduced.

8. The technical brain of the Tesla Corporation is the Development Branch ("Vyvoj"). The chief development office is located in the former Mikrofone plant in Prague. Other sections are at Sixka (last stop of the Number 16 streetcar in Prague), Hlubetin, Pardubice, and Vrchlabi.

9. The task of the Development Branch is the conducting of research, the perfecting of new instruments, and the drafting of production blueprints. It has at its disposal the copious Siemens files, which include not only plans for transformers, coils, measuring instruments, wire broadcasters, radio transmitters, amplifiers, and other Siemens products, but also a complete set of prints for the 12-channel BOA 12 system which was developed by Bell's of Antwerp and produced by the Mix and Genest works at Jaromer during the war.

10. Generally speaking, the Tesla Corporation is principally engaged in the production of articles previously developed and manufactured by Siemens, especially since large stocks of Siemens parts were left behind by the Germans in their retreat. These captured materials are being held at the Klamovka in Prague.

11. The Development Branch is divided into the following sections:

   a. Physical Research Section: Deals with purely theoretical mathematical and physical problems; solves the mathematical problems of other departments.

   b. Radio Receiver Section: Plans new receivers and works on airplane radios, such as the "Skrivanek" described below.

c. Transmitter Section: Deals mainly with problems concerning ultra-short-wave communications.

d. Acoustical Section: Deals with recorders, phonographs and amplifiers.

e. Telecommunications Section.

12. The Telecommunications Section has part of its organization in Pardubice, where work is being done on two-bank telephones and ultra short-wave telephones, and part in Pargau-Karlin, where the 12-channel system is being investigated. The main Telecommunications Section laboratories are located in Strasnice. Work is being done here on two and four-wire amplifiers in the 300-3,400 c/s bands, on fork instruments, on wide-band amplifiers for the multi-channel systems (12-10 kilocycle band, reinforced 7 N, conditions according to CCIF), and on impulse systems for long-range controls and guidance.

13. The Telecommunications Section recently constructed a Siemens-type inverter for radio telephones which serves to modulate the speech-carrying frequency and simultaneously to turn the frequency of the conversation around as in a mirror. This device has been delivered to the Army and also to members of the Government for their classified conversations. It operates on a carrier frequency of 2,600 c/s.

14. Tesla's Telecommunications Section has also constructed, according to old Siemens plans, a system for tapping and recording telephone conversations through a central post office. The apparatus is shortly to be put into operation. It can tap 20 conversations simultaneously and register two of these on records.

15. A further project is a plan for the development of co-axial cable communications in Czechoslovakia. The project will follow a French pattern. A main axis, a so-called Magistrala, is to cross the entire country, but a number of problems remain to be solved before the actual laying of the cable can begin. Amplifier stations will also have to be constructed.

16. With the aid of carrier systems (modeled on the lines of Standard SO I 12, Siemens M6 15, and BOA 12), a telephone network will be built to circle Bohemia and Moravia and to connect the individual towns. The system will allow for automatic dialing between towns, as is the case in Switzerland. The project is being studied at the Tesla laboratory in Karlin, and actual construction will begin in 1950. Equipment for a similar system will also be delivered to Bulgaria.

17. The Pardubice laboratories have been working on "VKV" (ultra short-wave?) communications according to a French pattern. It has thus far been applied in the Prague-Krkonose circuit, which uses the former German Prague-Berlin installations. One transmitter is on Petrin Mountain, near Prague, and the other is on the Snezka in the Krkonose mountains. The Prague and Trutnov city networks are connected with these transmitters, and dialing is automatic. This line of communications is to be extended to Poland. Under the terms of another transaction, Poland is also to receive two-and four-wire amplifying stations with 18 x F 24 vacuum tubes.

18. A special section of the Tesla Development Branch employs foreign technicians. The development of instruments to facilitate aircraft landings, for instance, is carried out under the guidance of Norton Nadler, an American. Research is conducted on a theoretical level, with various other departments constructing the required instruments and working models.

19. A transmitter-receiver for aircraft, called "Skrivanek", is being developed with much haste. The project has only recently been initiated, and very little is known concerning it, since access to the plans is strictly guarded.

25X1A [redacted]

25X1A

* [redacted] Comment: Probably S = 9.5 mA/V.

** [redacted] Comment: Probably R_p = 0.9 MΩ.